

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA

KIMBERLY MAYS,)
Plaintiff,)
v.)
JUUL LABS, INC.; ALTRIA GROUP,)
INC., and JOHN DOES 1 -)
100, INCLUSIVE,)
Defendants.)
Civil Action No. _____
JURY TRIAL DEMANDED

COMPLAINT

COMES NOW Plaintiff Kimberly Mays, by and through her undersigned counsel, and brings this complaint against Defendants JUUL Labs, Inc., Altria Group, Inc., and John Does 1 – 100 alleging as follows:

I. Introduction

1. Plaintiff, Kimberly Mays, suffered two devastating seizures immediately following her use of a JUUL e-cigarette. Once an independent mother of two, Ms. Mays is now in a state of dependency – relying on others to care for her. The dangerous nature of Defendants' electronic nicotine delivery system products ("ENDS"), and their failure to warn Plaintiff of the dangers associated with these products proximately caused Plaintiff's injuries as alleged herein.

2. In 2015, JUUL set out to recapture the magic of one of the most profitable products ever made – the cigarette. Due to heavy regulations and court orders that greatly limited how major cigarette manufacturers could market traditional cigarettes, JUUL saw an opportunity to exploit a new market. Seizing on regulatory inactions and loopholes for

traditional cigarettes, JUUL set out to develop and market a highly addictive product that could be packaged and sold under the guise of a cessation product. Through ads and other various means, JUUL presented its product as a means to help smokers achieve a goal they had previously been unable to achieve: to quit smoking.

3. JUUL vaping products were designed perfectly for this goal. JUUL's e-cigarette does not look or smell like a traditional cigarette. JUUL's e-cigarette design is sleek and minimalist. It is powered by a rechargeable battery, and it is no bigger than most USB flash drives. The JUUL e-cigarette device heats a nicotine-filled liquid JUUL pod which is sold separately from the device. These JUUL pods come in a variety of flavors that appeal to many users. In addition to the traditional Virginia tobacco, classic tobacco, and menthol flavors, JUUL pods come in flavors like mint, mango, crème brûlée, cucumber, and fruit. The variety of these flavors provides the traditional cigarette smoker with more options to supposedly help them quit smoking. These pods deliver a powerfully potent dose of nicotine, along with aerosol and other toxic chemicals into the lungs, body, and brain. Unlike noxious cigarette smoke, when a JUUL user exhales, the smoke is virtually undetectable. JUUL's e-cigarette is small, easily concealable, and can be used practically anywhere.

4. Defendant JUUL designed its device to deliver potently high doses of nicotine to its user. By studying cigarette industry archives, JUUL learned how to

manipulate the nicotine in its products to increase sales. JUUL designed its products to have maximum inhalability without any “throat hit” or irritation that would serve as a natural deterrent to new JUUL vaping product users. One purpose of this design was to convince traditional cigarette smokers that the JUUL vaping product was more smooth to consume compared to a traditional cigarette. While traditional smokers were accustom to the throat hit associated with cigarettes, JUUL provided its users with a product that had a smoother throat hit all while delivering substantially higher concentrations of nicotine per puff than traditional cigarettes and most other e-cigarettes. This combination of ease of inhalation and high nicotine delivery makes JUUL vaping products dangerous.

5. Since 2015 when JUUL vaping products hit the market, JUUL vaping products have become pervasive across the country. JUUL not only dominates the multi-billion-dollar e-cigarette market, but has expanded the size of the market considerably – via smokers looking to quit smoking. The cigarette company Altria (formerly known as Philip Morris) acquired a 35% stake in JUUL for \$12.8 billion, giving Altria access to both the traditional cigarette smoker as well as the smoker looking to quit.

6. As a result of Defendants’ conduct, Plaintiff has suffered catastrophic personal injuries and seeks all appropriate remedies and relief.

II. Jurisdiction and Venue

7. This Court has subject matter jurisdiction over this case through Title 28 U.S.C. §

1332(a) in that the jurisdictional amount exceeds \$75,000.00 dollars and there is complete diversity of parties. This Court also has supplemental jurisdiction over Plaintiff's state law claims pursuant to 28 U.S.C. § 1337.

8. This Court has personal jurisdiction over Defendants, each of which has substantial contacts and business dealings throughout Pennsylvania. Defendants have purposefully availed themselves of the advantage of conducting business within this District. All causes of action herein relate to Defendants' wrongful actions, conduct, and omissions within Pennsylvania and consequences and damages relates to said wrongful actions, conduct, and omissions.

9. Venue is proper in this judicial district because many of the Defendants' acts and omissions that gave rise to the causes of action of the Complaint occurred in this judicial District.

III. The Parties

A. The Plaintiff

10. Plaintiff Kimberly Mays is a resident of Westmoreland County, Pennsylvania.

11. Beginning in April 2019, Ms. Mays was exposed to JUUL's advertising and promotional efforts via many sources such as social media, print, and other advertisements.

12. Ms. Mays regularly purchased and consumed JUUL vaping products from April 2019 through July 2019, primarily in Westmoreland County, Pennsylvania.

13. Ms. Mays was initially attracted to JUUL vaping products for cessation purposes. She consumed the Virginia tobacco flavor while using JUUL vaping products.

14. Ms. Mays was unaware when she first started using JUUL vaping products that its use could cause seizures, strokes, or other injuries. Had she known these things, she would not have started using JUUL vaping products.

15. While Ms. Mays hoped to use JUUL vaping products as a cessation product, she used her JUUL e-cigarette as regularly, if not more so, than she would traditional cigarettes. Ms. Mays vaped roughly 30 JUUL pods during the three-month period that she used JUUL's product.

16. In June of 2019, after approximately 2 months of JUUL vaping product use, Ms. Mays suffered a seizure. Ms. Mays's seizure was so severe it required hospitalization. Ms. Mays used her JUUL vaping product less than 30 minutes prior to her seizure.

17. After this first seizure, Ms. Mays continued to use JUUL vaping products until July 2019 when she suffered a second seizure. Once again, Ms. Mays used her JUUL vaping product less than 30 minutes prior to her second seizure. This second seizure was so severe that it also required hospitalization. Ms. Mays stopped using JUUL products after this second seizure.

18. Ms. Mays has suffered multiple seizures, diagnosed short term memory loss, mood shifts, and permanent altering of her brain. JUUL's vaping products proximately caused Ms. Mays's injuries.

B. The Defendants

19. Defendant JUUL Labs, Inc. ("JUUL") is a Delaware corporation, having its principal place of business in San Francisco, California.

20. JUUL originally operated under the name PAX Labs, Inc. In 2017, it was renamed JUUL Labs, Inc.

21. JUUL manufactures, designs, sells, markets, promotes, and distributes JUUL e-cigarettes.

22. JUUL ratified each and every act or omission alleged herein in proximately causing the injuries and damages alleged herein.

23. Defendant, Altria Group, Inc. ("Altria") is a Virginia corporation, having its principal place of business in Richmond, Virginia.

24. Altria acquired 35% ownership in JUUL to, among other things, sell promote, market, and distribute JUUL e-cigarettes. Pursuant to a services agreement, JUUL will have access to Altria's industry infrastructure.

25. The Plaintiff presently lacks information sufficient to specifically identify the true names or capacities, whether individual, corporate, or otherwise, of the Defendants sued herein under the fictitious names DOES 1 through 100 inclusive. The Plaintiff will amend this Complaint to show their true names and capacities if and when they are ascertained. The Plaintiff is informed and believes, and on such information and belief alleges, that each of the Defendants named as a DOE is responsible in some manner for the events and occurrences alleged in this Complaint and is liable for the relief sought herein.

IV. Factual Allegations

A. JUUL Seeks to Re-create the “Magic” of the Cigarette, the “Most Successful Consumer Product of All Time,” Using the Cigarette Industry’s Playbook.

26. JUUL’s founder James Monsees has described the cigarette as “the most successful consumer product of all time . . . an amazing product.”¹ Because of “some problems” inherent in the cigarette, JUUL’s founders set out to “deliver[] solutions that refresh the magic and luxury of the tobacco category.”²

27. Monsees saw “a huge opportunity for products that speak directly to those consumers who aren’t perfectly aligned with traditional tobacco products.”³ With a focus on recreating the “ritual and elegance that smoking once exemplified,”⁴ Monsees and Adam Bowen set out to “meet the needs of people who want to enjoy tobacco but don’t self-identify with-or don’t necessarily want to be associated with – cigarettes.”⁵

28. JUUL used the cigarette industry’s prior practices as a playbook. Monsees has publicly admitted that JUUL built its e-cigarette business by first consulting cigarette industry documents, including board meeting minutes, made public under the Master Settlement Agreement

¹ Chaykowski, *Billionaires-to-be: Cigarette Breakers – James Monsees and Adam Bowen have cornered the US e-cigarette market with Juul. Up next: The World*, FORBES Magazine (Sep. 27, 2018) www.forbesindia.com/article (last visited Sep. 6, 2019).

² Mings, *Ploom Model Two Slays with Slick Design and Heated Tobacco Pods*, Solid Smack (April 23, 2014) www.solidsmack.com/design/ploom-modeltwo-slick-design-tobacco-pods (last visited Sep. 6, 2019).

³ *Id.*

⁴ *James Monsees – Co-founder and CEO of Ploom*, IDEAMENSCH (April 11, 2014), www.ideamensch.com/james-monsees/ (last visited Sep. 6, 2019).

⁵ *Id.*

that had been reached between the cigarette industry, governmental officials, and injured smokers. “[Industry documents] became a very intriguing space for us to investigate because we had so much information that you wouldn’t normally be able to get in most industries. And we were able to catch up, right, to a huge, huge industry in no time. And then we started building prototypes.”⁶

29. JUUL researched how cigarette companies had chemically manipulated nicotine content to maximize delivery: "We started looking at patent literature. We are pretty fluent in 'Patentese.' And we were able to deduce what had happened historically in the tobacco industry."⁷ Among the documents JUUL would have found were those documenting how to manipulate nicotine pH to maximize the delivery of nicotine in a friendly vapor that delivers minimal "throat hit"-a combination that creates unprecedented risks of nicotine abuse, as detailed further below.

30. JUUL also engaged former cigarette industry researchers to consult on the design of their product. JUUL's founder James Monsees noted in Wired magazine that "people who understood the science and were listed on previous patents from tobacco companies aren't at those companies anymore. If you go to Altria's R&D facility, it's empty." The Wired article stated that "some of those people are now on Pax's team of advisers, helping

⁶ Montoya, *Pax Labs: Origins with James Monsees*, Social Underground, <https://socialunderground.com/2015/01/pax-ploom-origins-future-james-monsees/> (last visited Sep. 6, 2019).

⁷ *Id.*

develop JUUL.”⁸

31. JUUL achieved its vision. Since its launch in 2015, JUUL has become the dominant e-cigarette manufacturer in the United States. Its revenues grew by 700% in 2017. According to a recent Wells-Fargo report, JUUL owns three-quarters of the e-cigarette market.⁹

B. JUUL is a Sleek, Easy to Carry Nicotine Delivery Device That Can Be Used Almost Anywhere.

32. The JUUL e-cigarette looks sleek and high-tech. JUUL e-cigarettes look like a USB flash drive, and it actually charges in a computer's USB drive. It is about the size and shape of a pack of chewing gum; it is small enough to fit in a closed hand. A JUUL e-cigarette is easy to carry around with the user wherever they choose to go. The odor emitted from a JUUL e-cigarette is a reduced aerosol without much scent - unlike the distinct smell of conventional cigarettes.

33. The thin, rectangular JUUL e-cigarette device consists of an aluminum shell, a battery, a magnet (for the USB-charger), a circuit board, an LED light, and a pressure sensor. Each JUUL pod is a plastic enclosure containing 0.7 milliliters of JUUL's patented nicotine liquid and a coil heater. When a sensor in the JUUL e-cigarette detects the movement of air

⁸ Pierce, *This Might Just Be The First Great E-Cig*, WIRED, (April 21, 2015) <https://www.wired.com/2015/04/pax-juul-ecig/> (last visited Sep. 6, 2019).

⁹ Durbin *et al.*, *Letter from United States Senators to Kevin Burns CEO JUUL Labs, Inc.*, (April 8, 2019) <https://www.durbin.senate.gov/imo/media/doc/FINAL%20JUUL%20Letter%204.8.19.pdf> (last visited Sep. 6, 2019)

caused by suction on the JUUL pod, the battery in the JUUL device activates the heating element, which in turn converts the nicotine solution in the JUUL pod into a vapor consisting principally of nicotine, benzoic acid, glycerin, and propylene glycol. A light embedded in the JUUL device serves as a battery level indicator and lights up in a "party mode" display of a rainbow of colors when the device is waved around.

34. JUUL manufactures and distributes its nicotine formulation as JUUL pods, which contain JUUL's nicotine liquid. JUUL sells its pods in either a two or four-pack in a variety of flavors, many of which have no combustible cigarette analog, including mango, "cool" cucumber, fruit medley, "cool" mint, and crème brulee.

35. The physical design of the JUUL device (including its circuit board) and JUUL pod determines the amount of aerosolized nicotine the JUUL emits. By altering the temperature, maximum puff duration, or airflow, among other things, the Defendants can finely tune the amount of nicotine vapor the JUUL device delivers.

C. E-Cigarettes Containing Nicotine Increase the Risk of Health Concerns.

36. All leading health authorities support the three major conclusions of a 1988 report by the Surgeon General of the United States regarding nicotine and tobacco:

- a. Cigarettes and other forms of tobacco are addictive;
- b. Nicotine is the drug in tobacco that causes addiction;
- c. The physiological and behavioral processes that determine tobacco addiction are similar to those that determine heroin and cocaine addiction.

37. Nicotine fosters addiction through the brain's "reward" pathway. A stimulant and a relaxant, nicotine affects the central nervous system; increases blood pressure, pulse, and metabolic rate; constricts blood vessels of the heart and skin; and causes muscle relaxation. When nicotine is inhaled it enters the bloodstream through membranes in the mouth and upper respiratory tract and through the lungs. Once nicotine in the bloodstream reaches the brain, it binds to receptors, triggering a series of physiologic effects in the user that are perceived as a "buzz" that includes pleasure, happiness, arousal, and relaxation of stress and anxiety. These effects are caused by the release of dopamine, acetylcholine, epinephrine, norepinephrine, vasopressin, serotonin, and beta endorphin. With regular nicotine use, however, these feelings diminish and the user must consume increasing amounts of nicotine to achieve the same pleasurable effects.¹⁰

38. The neurological changes caused by nicotine create addiction. Repeated exposure to nicotine causes neurons in the brain to adapt to the action of the drug and return brain function to normal. This process, called neuroadaptation, leads to the development of tolerance in which a given level of nicotine begins to have less of an effect on the user.¹¹

39. Once a brain is addicted to nicotine, the absence of nicotine causes compulsive drug-seeking behavior, which, if not satisfied, results in withdrawal symptoms including anxiety, tension, depression, irritability, difficulty in concentrating, disorientation, increased eating, restlessness, headaches, sweating, insomnia, heart palpitations, and tremors - and intense cravings for nicotine. Though smokers commonly report pleasure and reduced anger, tension, depression, and stress after smoking a cigarette, many of these effects are actually due

¹⁰ Neal L. Benowitz, Pharmacology of Nicotine: Addiction, Smoking-Induce Disease, and Therapeutics (Sep. 27, 2009) Ann. Rev. Pharmacol Toxicol 49: 57-71, <https://www.ncbi.nlm.nih.gov/pubmed/18834313> (last visited Sep. 6, 2019).

¹¹ *Id.*

to the relief of unpleasant withdrawal symptoms that occur when a person stops smoking and deprives the brain and body of nicotine. Studies have found that most smokers do not like smoking most of the time but do so to avoid withdrawal symptoms.¹²

40. Nicotine concentration in e-cigarettes such as JUUL can deliver a powerfully high content of nicotine. Powerfully high contents of nicotine have been causally linked to induce nicotine intoxication syndrome which can cause seizures.¹³

41. Research has also demonstrated nicotine overdose induces convulsive seizures in humans.¹⁴

42. Nicotine is also associated with cardiovascular, reproductive, and immunosuppressive problems, and is also a carcinogen.¹⁵ Nicotine adversely affects the heart, eyes, reproductive system, lungs, and kidneys. It is well-established that nicotine increases blood pressure. Exposure to nicotine from sources such as nicotine gum still produces an increased risk of coronary vascular disease (CVD) by producing acute myocardial ischemia, as well as an increased risk of peripheral arterial disorders. Aside from its use as a stimulant, the only other known use of nicotine is as an insecticide.¹⁶

43. Research has also demonstrated that e-cigarettes significantly increase blood

¹² Rigotti, Strategies to Help a Smoker Who is Struggling to Quit (Oct. 17, 2012) JAMA 308 (15): 1573-1580, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4562427/> (last visited Sep. 6, 2019); Paolini & De Biasi, Mechanistic Insights into Nicotine Withdrawal (Oct. 15, 2011) Biochem Pharmacol 82(8): 996-1007, <https://www.ncbi.nlm.nih.gov/pubmed/21782803> (last visited Sep. 6, 2019).

¹³ National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Population Health and Public Health Practice; Committee on the Review of the Health Effects of Electronic Nicotine Delivery Systems; Eaton DL, Kwan LY, Stratton K, editors. Public Health Consequences of E-Cigarettes. Washington (DC): National Academies Press (US), 4, Nicotine. <https://www.ncbi.nlm.nih.gov/books/NBK507191> (last visited Sep. 6, 2019).

¹⁴ Iha, Higor A. *et al.*, Nicotine Elicits Convulsive Seizures by Activating Amygdalar Neurons (2017) 8:57 (Feb. 9, 2017) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5298991/> (last visited Sep. 6, 2019).

¹⁵ Mishra *et al.*, Harmful Effects of Nicotine (2015) Indian J. Med. Paediatric Oncol., 36(1): 24-31, (Jan. – Mar. 2015), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4363846/> (last visited Sep. 6, 2019).

¹⁶ *Id.*

pressure and arterial stiffness, which increases the risk for strokes and heart attacks.¹⁷

44. With respect to JUUL products in particular, one recent study found that "the concentrations of nicotine and some flavor chemicals (e.g. ethyl maltol) are high enough to be cytotoxic in acute in vitro assays."¹⁸

D. JUUL Designed its E-Cigarettes to Make them Easy for People to Inhale and to Deliver Substantially Higher Doses of Nicotine than Cigarettes.

45. According to the National Institutes of Health, the "amount and speed of nicotine delivery . . . plays a critical role in the potential for abuse of tobacco products."¹⁹ The cigarette industry has long known that "nicotine is the addicting agent in cigarettes"²⁰ and that "nicotine satisfaction is the dominant desire" of nicotine addicts.²¹

46. For this reason, cigarette companies spent decades manipulating nicotine in order to foster and maintain cigarette consumption in their customers. For example, R.J. Reynolds Tobacco Company ("RJR") developed and patented nicotine salt additives such as nicotine benzoate to increase nicotine delivery in cigarette smoke. As detailed in an RJR memorandum titled "Cigarette concept to assure RJR a larger segment of the youth market," manipulating the pH of nicotine was expected to give cigarettes an "additional nicotine 'kick'."

¹⁷ Vlachopoulos *et al.*, Electronic cigarette smoking increases aortic stiffness and blood pressure in young smokers, *J. Am. Col. Cardiol.*, (June 17, 2016), 47(23): 2802-2803, <https://www.ncbi.nlm.nih.gov/pubmed/27282901> (last visited Sep. 6, 2019).

¹⁸ Thompson, Vaping May Hurt the Lining of Your Blood Vessels (May 28, 2019) WebMD.

¹⁹ How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking – Attributable Disease: A Report of the Surgeon General, Chapter 4, Nicotine Addiction: Past and Present (2010), <https://www.ncbi.nlm.nih.gov/books/NBK53017/> (last visited Sep. 6, 2019).

²⁰ Brown & Williamson official A.J. Mellman, (1983) Tobacco Industry Quotes on Nicotine Addiction, www.ok.gov/okswat/documents/Tobacco%20Industry (last visited Sep. 6, 2019).

²¹ *Id.*; R.J. Reynolds Tobacco Co. Marketing memo, 1972.

²² This kick was attributed to increased nicotine absorption associated with lower pH.²³

47. JUUL knowingly used the RJR research and conclusions to produce a similar nicotine kick to thereby encourage and promote increased use and sales of JUUL e-cigarettes. In U.S. patent No. 9,215,895 ("the '895 patent"), assigned to Pax Labs, Inc. and listing JUUL executive Adam Bowen as an inventor, JUUL describes a process for combining benzoic acids with nicotine to produce nicotine salts, a formulation that mimics the nicotine salt additive developed by RJR decades earlier.

48. In a 2015 interview, Ari Atkins, a JUUL research & development engineer and one of the inventors of the JUUL device, said this about the role of acids: "[i]n the tobacco plant, there are these organic acids that naturally occur. And they help stabilize the nicotine in such a way that makes it ..." He pauses. "I've got to choose the words carefully here: Appropriate for inhalation."²⁴

49. JUUL's manipulation of nicotine pH directly affects the palatability of nicotine inhalation by reducing the "throat hit" users experience when vaping. Benzoic acid reduces the pH of solutions of nicotine, an alkali with a pH of 8.0 in its unadulterated, freebase form. This reduction in pH converts naturally occurring unprotonated nicotine, which causes irritation in the throat and respiratory tract, to protonated nicotine, which is not absorbed in the throat or upper respiratory tract and, therefore, does not irritate the throat. A recent study found that JUUL's e-liquid pods had a pH of under 6.0, suggesting that the JUUL e-cigarette contains almost no freebase (i.e., non-salt form) nicotine.

²² *Id.*, 1973 R.J. Reynolds Co. memo titled, "Cigarette Concept to Assure RJR a Larger Segment of the Youth Market."

²³ Benowitz, *et al.*, Nicotine Chemistry, Metabolism, Kinetics, and Biomarkers, Nicotine Psychopharmacology (Oct. 13, 2010), Handb Exp Pharmacol (192): 29-60, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2953858/> (last visited Sep. 6, 2019).

²⁴ Pierce, *This Might Just Be The First Great E-Cig*, WIRED, (April 21, 2015) <https://www.wired.com/2015/04/pax-juul-ecig/> (last visited Sep. 6, 2019).

50. The vapor from a JUUL e-cigarette's e-liquid contains about the same ratio of free base nicotine and hence causes the same amount of irritation as a nearly nicotine-free 3 mg/mL e-liquid.²⁵

51. The Duell Study authors found that the low freebase fraction in its aerosols suggested a "decrease in the perceived harshness of the aerosol to the user and thus a greater abuse liability."²⁶

52. The authors noted that "tobacco company documents suggest that products [like JUUL] with high nicotine levels but a low [percentage of freebase nicotine] will yield vape aerosols of much reduced harshness as compared to products with even only moderate nicotine levels" but high percentages of freebase nicotine.²⁷

53. JUUL's e-cigarette's lack of a throat hit increases the risk of using the product because it masks the amount of nicotine being delivered by eliminating the throat sensory feedback normally associated with a large dose of nicotine. The "throat hit" is part of the body's alert system, letting a person know they are inhaling something harmful. Eventually, the irritation to the throat will cause even the most compulsive smoker to wait before the next inhalation. Reducing or removing this feedback impairs the user's ability to ascertain that they are consuming a toxin. As a result, the cravings for nicotine can be satisfied nonstop, and will repeatedly expose the user to the health risks associated with the product, such as significantly increased blood pressure, seizures, or strokes.

54. JUUL sells products that contain relatively low amounts of throat-irritating

²⁵ Duell, *et al.*, Free-Base Nicotine Determination in Electronic Cigarette Liquids by 1H NMR Spectroscopy (June 18, 2018) 31 Chem. Res. Toxicol. 431-434,

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6008736/> (last visited Sep. 6, 2019).

²⁶ *Id.* at 431-434

²⁷ *Id.*

freebase nicotine yet contain and deliver far higher concentrations of nicotine than cigarettes or other electronic nicotine delivery systems ("ENDS") containing freebase nicotine.

55. Blood plasma studies in the '895 patent²⁸ show that vaping nicotine benzoate increases nicotine delivery compared to cigarettes or vaporized solutions of freebase nicotine. In fact, nicotine uptake was up to four times higher for nicotine salt formulations than traditional cigarettes (approximately 4 ng/mL/min compared to approximately 1 ng/mL/min). JUUL's data also indicates that nicotine salt solutions produce a higher heart rate in a shorter amount of time (a 50 beats/minute increase within 2 minutes for nicotine salt, versus a 40 beats/minute increase in 2.5 minutes for a Pall Mall cigarette). Nicotine salts also cause a faster and more significant rise in heart rate than placebo or vaporized freebase nicotine.

56. JUUL's '895 patent shows that a 4% solution of benzoic acid nicotine salt causes a peak nicotine-blood concentration ("Cmax") of approximately 15 ng/mL, compared to a Cmax of 11 ng/mL for a Pall Mall cigarette.²⁹

57. As high as the reported nicotine dose reported for JUUL pods is, the actual dose is likely higher. Though the strongest benzoic acid concentration mentioned in the '895 patent is 4% (i.e., 40 mg/mL of benzoic acid), one study tested four flavors of JUUL pods and found a 4.5% benzoic acid (44.8 ± 0.6) solution.³⁰ That study found that JUUL pods contained a concentration of 6.2% nicotine salt (about 60 mg/mL), rather than the 5% nicotine (about 50 mg/mL) advertised. JUUL pods containing an absolute nicotine concentration 1.2% higher than the stated 5% on the label (a relative increase of over 20%) coupled with more benzoic acid than listed in the '895 patent produce higher nicotine absorption than expected for the

²⁸ See U.S. Patent No. 9,215,895.

²⁹ '895 Patent, at col. 26, 11. 33-50.

³⁰ Pankow, *et al.*, Benzene Formation in Electronic Cigarettes (Mar. 8, 2017) PLoS One. 2017; 12(3):e0173055 <https://www.ncbi.nlm.nih.gov/pubmed/28273096> (last visited Sep. 6, 2019).

advertised formulation.

58. Other studies have reported even higher actual concentrations of nicotine in JUUL pods. Some experts estimate that JUUL pods deliver the same nicotine as two packs of cigarettes.³¹

59. In any event, a JUUL e-cigarette delivers doses of nicotine that are materially higher than delivered by combustible cigarettes in their JUUL products. As a paper published by the European Union citing the United Kingdom Medicines and Healthcare Products Regulatory Agency notes, "an e-cigarette with a concentration of 20 mg/ml delivers approximately 1 milligram of nicotine in 5 minutes (the time needed to smoke a traditional cigarette, for which the maximum allowable delivery is 1 mg of nicotine)."³² With at least 59 mg/mL of nicotine delivered in a salt form that increases the rate and efficiency of uptake (and even with a lower mg/mL amount), a JUUL pod will easily exceed the nicotine dose of a traditional cigarette. Not surprisingly, the European Union has banned all e-cigarette products with a nicotine concentration of more than 20 mg/ml nicotine, and Israel has done the same.³³ As Israel's Deputy Health Minister has noted, "a product that contains a concentration of nicotine that is almost three times the level permitted in the European Union constitutes a danger to public health and justifies immediate and authoritative steps to prevent it from

³¹ 6 Important Facts About JUUL, Truth Initiative, <https://truthinitiative.org/research-resources/emerging-tobacco-products/6-important-facts-about-juul> (last visited Sep. 6, 2019).

³² "E-Cigarettes" https://ec.europa.eu/health/sites/health/files/tobacco/docs/fs_ecigarettes_en.pdf (last visited Sep. 6, 2019) (citing United Kingdom Medicines and Healthcare Products Regulatory Agency and industry reports).

³³ Belluz, *JUUL the Vape Device Teens are Getting Hooked On, Explained*, (Dec. 20, 2018) Vox <https://www.vox.com/science-and-health/2018/5/1/17286638/juul-vaping-e-cigarette> (last visited Sep. 6, 2019).

entering the Israeli market."³⁴

60. Comparison of available data regarding per puff nicotine intake corroborates the other JUUL studies (mentioned above), indicating that JUUL vaping products deliver about 30% more nicotine per puff. Specifically, a recent study of JUUL pods found that "[t]he nicotine levels delivered by the JUUL vaping products are similar to or even higher than those delivered by cigarettes."³⁵ The Reilly study tested JUUL's tobacco, crème brûlée, fruit punch, and mint flavors and found that a puff of a JUUL vaping product delivered 164 ± 41 micrograms of nicotine per puff. By comparison, a 2014 study using larger 100 mL puffs found that a Marlboro cigarette delivered 152-193 $\mu\text{g}/\text{puff}$.³⁶ Correcting to account for the different puff sizes between the Reilly and Schroeder studies, this suggests that, at 75 mL/puff, a Marlboro would deliver between 114 and 144 $\mu\text{g}/\text{puff}$. In other words, empirical data suggests that JUUL vaping products deliver up to 36% more nicotine per puff than a Marlboro.

61. Because "nicotine yield is strongly correlated with tobacco consumption,"³⁷ a JUUL pod with more nicotine will strongly correlate with higher rates of consumption of JUUL pods, generating more revenue for JUUL. For example, a historic cigarette industry study looking at smoker employees found that "the number of cigarettes the employees smoked per day was directly correlated to the nicotine levels."³⁸ In other words, the more nicotine in the cigarettes, the

³⁴ Linder-Ganz, *JUUL Warns It Will Fight Israel Over Its Potential Ban on Its E-Cigarettes*, (Jan. 30, 2018) <https://www.haaretz.com/israel-news/business/juul-warns-it-will-fight-israel-over-potential-ban-on-its-e-cigarettes-1.6140058> (last visited Sep. 6, 2019).

³⁵ Reilly *et al.*, Free Radical, Carbonyl, and Nicotine Levels Produced by JUUL Electronic Cigarettes (Oct. 20, 2018) Nicotine Toh Res. 3 (the "Reilly Study") <https://www.ncbi.nlm.nih.gov/pubmed/30346584> (last visited Sep. 6, 2019).

³⁶ Schroeder & Hoffman, Electronic Cigarettes and Nicotine Clinical Pharmacology (May 2014) <https://www.ncbi.nlm.nih.gov/pubmed/24732160> (last visited Sep. 2019).

³⁷ Jarvis, *et al.*, Nicotine Yield From Machine Smoked Cigarettes and Nicotine Intakes in Smokers: Evidence From a Representative Population Survey (Jan. 2001), JNCI Vol. 93, Issue 2, 134-138 <https://www.ncbi.nlm.nih.gov/pubmed/11208883> (last visited Sep. 6, 2019).

³⁸ UCSF Library, 1003285443-5443 (US 85421).

more cigarettes a person smoked.

62. Despite the above data, Defendants have failed to disclose to consumers that the JUUL pods' nicotine salt formulation delivers an exceptionally potent dose of nicotine.

63. By delivering such potent doses of nicotine, JUUL products magnify the health risks posed by nicotine, significantly increase blood pressure, and place users at heightened risk for stroke, heart attacks, seizures, and other events such as respiratory issues.

64. At the same time, as discussed above, the throat hit from nicotine salts is much lower than that of combustible tobacco products, making it easier to inhale. According to researchers, the "high total nicotine level (addictive delivery)" of a JUUL vaping product coupled with its easily inhalable nicotine vapor is "likely to be particularly problematic for public health."³⁹

65. The JUUL product's easy inhalability repeatedly exposes users to the toxic chemicals in the vapor, compounding the health risks to users, as described above.

66. JUUL has fraudulently concealed material information about the dangerous nature of its e-cigarettes. Defendants necessarily are in possession of all of this information.

E. JUUL Conspired with others in the Cigarette Industry to Engage Third Party Spokesperson to Downplay the Risks of E-cigarettes, Create Doubt, and Misrepresent the Benefits of Nicotine.

67. Because JUUL understood that it could not specifically make health-related claims without drawing the ire of the FDA, JUUL conspired with others, including unnamed Defendants Does 1-100, in the cigarette industry to engage consultants, academics, reporters, and other friendly sources such as the American Enterprise Institute, to serve as spokespersons and cheerleaders for e-cigarette products. Taking yet another page from the cigarette-industry playbook, these influencers masked their connection to the e-cigarette industry, while serving as its mouthpiece to cast doubt about

³⁹ Duell Study, 431, *see infra* at 25.

risks and overstate benefits.

68. For example, just as JUUL launched its e-cigarette, cigarette company expert witness Sally Satel published an article in Forbes Magazine touting the benefits of nicotine-claiming it aids in concentration-and stating that it is harmless.⁴⁰ In another article, she lauded efforts by JUUL and others to develop nicotine-related products, and cast any doubters as hysterical and creating a "panic."⁴¹

69. Numerous other articles, videos, and podcasts-also spread through social media-echoed this same message that the public health community was overreacting to e-cigarettes and in a panic about nothing.

70. During each of its multiple fundraising rounds, JUUL suggested that JUUL's e-cigarette was no more harmful than coffee.

71. On information and belief, JUUL and its co-conspirators spread this message through hired third-party spokespersons and influencers.

72. Furthering their campaign of doubt and confusion, when asked directly about health risks, JUUL's employees and founders would point reporters to other sources to indicate that its products had been shown to be safe, or not harmful, rather than admit what it knew were the dangers.

73. JUUL well-understood from the cigarette industry playbook that sowing doubt and confusion over the benefits and risks of e-cigarettes is key to long-term success. First, by creating a "two-sides-to-every-story" narrative, JUUL reduced the barriers to new users to try the product, and gave existing users permission to keep using the product to avoid the pain of withdrawal. Second, by

⁴⁰ Satel, *Nicotine Itself Isn't The Real Villain*, (Jun 19, 2015), Forbes, www.forbes.com/sites/sallysatel/2015/06/19/nicotine-can-save-lives/#60379f766f43 (last viewed Sep. 6, 2019).

⁴¹ Satel, *Why The Panic Over JUUL and Teen Vaping May Have Deadly Results*, (Apr 11, 2018), Forbes, www.forbes.com/sites/sallysatel/2018/04/11/why-the-panic-over-juul-and-teen-vaping-may-have-deadly-results/#6blec693ea48 (last viewed Sep. 6, 2019).

engaging people who looked like independent experts, JUUL staved off regulation and suppressed political opposition, allowing it a long runway to capture market share. Third, by belittling the public health community, JUUL neutered its most vocal threat.

74. Despite JUUL's attempt to avoid the ire of the FDA, the FDA has placed JUUL under scrutiny requesting documentation as to why nicotine salts are used in its products and why JUUL uses a nicotine concentration of 5% in its products.⁴²

75. Further, the FDA has become aware that some people who use e-cigarettes, such as JUUL's products, have experienced seizures.⁴³ The FDA is investigating several cases where JUUL products were specifically used and then the JUUL users suffered seizures shortly thereafter.⁴⁴

76. On information and belief, JUUL conspired with others in the cigarette industry, including Altria and Does 1 – 100, to fraudulently conceal the risks of e-cigarettes, recognizing that a campaign of doubt, misinformation and confusion would benefit all of them and would be the key to the industry's survival.

F. JUUL Intentionally Misrepresents and Grossly Understates the Amount of Nicotine in each JUUL Pod.

77. From JUUL's pre-release announcements to this day, JUUL, along with unnamed

⁴² *FDA warns JUUL Labs for marketing unauthorized modified risk tobacco products, including in outreach to youth: Agency sends out additional letter requesting more information on several issues, including outreach and marketing practices, as part of ongoing investigation.* U.S. Food & Drug Administration, Sept. 9, 2019, <https://www.fda.gov/news-events/press-announcements/fda-warns-juul-labs-marketing-unauthorized-modified-risk-tobacco-products-including-outreach-youth> (last visited Sep. 23, 2019).

⁴³ *Some E-cigarette Users Are Having Seizures, Most Reports Involving Youth and Young Adults,* U.S. Food & Drug Administration, Apr. 10, 2019, <https://www.fda.gov/tobacco-products/ctp-newsroom/some-e-cigarette-users-are-having-seizures-most-reports-involving-youth-and-young-adults> (last viewed Sept. 6, 2019).

⁴⁴ Edney, Anna and Turton, William. *JUUL Devices Cited in Seizure Reports That Started FDA Probe.* Bloomberg. Aug. 29, 2019. <https://www.bloomberg.com/news/articles/2019-08-29/juul-devices-cited-in-seizure-reports-that-triggered-fda-probe> (last visited Sep. 6, 2019).

Defendants Does 1-100 that provided marketing services to JUUL, has continuously and falsely represented that each pod contains only as much nicotine as a pack of cigarettes. JUUL repeats these claims widely in advertisements, press releases, on its packaging, and on its web site. For example, some JUUL advertisements and JUUL's website currently provides that each "JUUL pod is designed to contain approximately 0.7mL with 5% nicotine by weight at time of manufacture which is approximately equivalent to 1 pack of cigarettes or 200 puffs."

78. This statement is false and seriously misleading because, as JUUL knows, it is not just the amount of nicotine, but the efficiency with which the product delivers nicotine into the bloodstream that determines the product's narcotic effect and other health risks.

79. Defendants know that benzoic acid affects pH and "absorption of nicotine across biological membranes."⁴⁵

80. Assuming a concentration of 59 mg/mL, JUUL's reported nicotine content corresponds to about 40 mg of nicotine per 0.7 mL JUUL pod. If, as JUUL claims, this is equivalent to one pack of cigarette (or 20 cigarettes), that implies 2 mg of nicotine per cigarette.

81. JUUL's equivalency claim further assumes 10 puffs per cigarette (i.e., 200 puff per pack), or 0.2 mg (200 μ g) of nicotine per puff.

82. Typically, a cigarette that delivers around one milligram of nicotine in smoke retains "about 14-20 milligrams of nicotine in the unsmoked rod," *USA v. Philip Morris, Inc.* 449 F.Supp.2d 1, 567 (D.D.C. 2006), for an overall delivery of 5-7% of the cigarette's actual nicotine content. A study by the Center for Disease Control found that in "commercial

⁴⁵ Benowitz, *et al.*, Nicotine Chemistry, Metabolism, Kinetics, and Biomarkers, Nicotine Psychopharmacology (Oct. 13, 2010), Handb Exp Pharmacol (192): 29-60, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2953858/> (last visited Sep. 6, 2019).

cigarette brands, nicotine concentrations ranged from 16.2 to 26.3 mg nicotine/g tobacco (mean 19.2 mg/g; median 19.4 mg/g).⁴⁶ Assuming an average of 19 milligrams of nicotine per cigarette, an average pack of cigarettes contains 380 milligrams of nicotine, or six times as much nicotine as the 62 milligrams reported for each JUUL pod. Yet the average pack would be expected to deliver only 5-7% (19-27 mg) of its nicotine content to the user. In line with this expectation, a study of thousands of smokers found smokers intaking between 1.07 to 1.39 milligrams per cigarette (21.4-27.8 mg per pack).⁴⁷ This is less than half of the amount of nicotine contained in a JUUL pod (i.e., 2 mg per "cigarette" based on JUUL's stated concentration, or 200 µg per puff assuming 100% delivery). Even with the slightly lower efficiency of delivery demonstrated in studies like Reilly (about 82%, for averages of 164 µg per puff), this amounts to a substantially higher amount of nicotine that a human will absorb from a JUUL pod than from smoking a pack cigarettes,

83. JUUL's statement in its advertisements that each JUUL pod contains about as much nicotine as a pack of cigarettes is therefore literally false and likely to mislead, because the amount of nicotine contained in the JUUL pod is perhaps six times less than in a pack of cigarettes, but the actual amount of nicotine consumed via JUUL pod is as much as twice as high as that via cigarettes. This fact is never mentioned by JUUL or Does 1-100.

84. Further, while a pack of cigarettes contains 20 cigarettes which each have to be separately lit, the JUUL e-cigarette can be inhaled continuously, and often can be used indoors without detection by others, a feature that JUUL promoted heavily in its advertisements,

⁴⁶ Lawler *et al.*, Surveillance of Nicotine and pH in Cigarette and Cigar Filler (April 1, 2018) *Tob. Reg. Sci.* 3(Suppl 1): 101-116, <https://www.ncbi.nlm.nih.gov/pubmed/28989950> (last viewed Sept. 6, 2019).

⁴⁷ Jarvis, *et al.*, Nicotine Yield From Machine Smoked Cigarettes and Nicotine Intakes in Smokers: Evidence From a Representative Population Survey (Jan. 2001), *JNCI* Vol. 93, Issue 2, 134-138 <https://www.ncbi.nlm.nih.gov/pubmed/11208883> (last visited Sep. 6, 2019).

eliminating the need for smoking breaks. Thus, the device design leads users to intake far more nicotine than would occur with cigarettes.

85. Finally, the JUUL device does not have a manual or automatic “off” switch. On information and belief, neither the JUUL pod nor the programming of the JUUL device's temperature or puff duration settings limit the amount of nicotine JUUL delivers each puff to the upper bound of a cigarette's nicotine delivery. Thus, in contrast to a traditional cigarette, which self-extinguishes as each cigarette is consumed, the JUUL e-cigarette allows non-stop nicotine consumption, which is limited only by the device's battery. As a result, the JUUL is able to facilitate consumption of extraordinarily high levels of nicotine that a cigarette cannot match. This makes it easier for the user to become exposed to higher levels of nicotine and poses additional health risks.

86. Contrary to Defendants' representations, the above data indicate that each JUUL pod delivers significantly more nicotine than a pack of cigarettes, both per pack and per puff. JUUL's products thus have the foreseeable effect of luring consumers who react positively to a strong nicotine "kick" without alerting them of the adverse health effects associated with nicotine consumption.

87. Thus, the use of a JUUL e-cigarette is more harmful when compared to cigarettes in that the extraordinarily high levels of nicotine can cause heightened blood pressure, seizure, stroke, and the repetitive exposure to the toxins and chemicals in JUUL's vaping product leads to health issues.

G. Defendants Never Warned Ms. Mays That JUUL's Products were Dangerous and Contained a High Level of Nicotine.

88. At no time before Ms. Mays suffered her seizures did JUUL provide any warnings about the risks of stroke, seizure, or other brain damage.

89. At no time before Ms. Mays suffered her seizure did JUUL warn Ms. Mays that JUUL products were unsafe for her, nor instruct her on how much JUUL would be safe to consume.

90. Despite making numerous revisions to its packaging since 2015, JUUL did not add nicotine warnings until forced to do so in August of 2018. The original JUUL product labels had a California Proposition 65 warning indicating that the product contains a substance known to cause cancer, and a warning to keep JUUL pods away from children and pets, but contained no warnings specifically about the known effects, or possible long-term effects, of nicotine or vaping/inhaling nicotine salts.

91. Furthermore, JUUL misrepresents the nicotine content of JUUL pods by representing it as 5% strength. As discussed above, JUUL pods contain more than 5% nicotine by volume, and deliver it in a form that is particularly potent.

92. Instead, JUUL marketed its JUUL products as an "alternative to cigarettes," thereby giving the false impression that they are not harmful like traditional cigarettes and safe to use.

93. Plaintiff did not and could have known the risks associated with JUUL, because Defendants had exclusive knowledge about its product, including its design, and concealed that information from her.

94. Instead, as a result of JUUL's wildly successful marketing campaign, based on tactics developed by the cigarette industry and amplified in social media, Ms. Mays reasonably believed that JUUL was safe, harmless, and a way to quit smoking.

H. JUUL's Conduct Harmed Ms. Mays.

95. Ms. Mays began using JUUL e-cigarettes when she was exposed to advertising and promotions for JUUL via print and other sources. These ads, promotions, and other sources made JUUL e-cigarettes seem like a healthy, easy way to quit smoking.

96. Plaintiff first tried JUUL e-cigarettes in or around April 2019.

97. Plaintiff started using JUUL e-cigarettes because the device was already so popular with teens, young adults, and adults.

98. Plaintiff used the Virginia Tobacco flavor JUUL pod. Like the majority of people, when Plaintiff first started using JUUL e-cigarettes, she was not aware of how much nicotine the device contained or that it carried any health risks.

99. Ms. Mays relied to her detriment on JUUL's representations that the product was safe, not harmful, fun, and that each JUUL pod contained no more nicotine than approximately a pack of cigarettes.

100. JUUL never warned Ms. Mays that JUUL e-cigarettes were dangerous, contained more nicotine than advertised, could cause her to suffer a seizure, or would permanently alter her brain.

101. Had Ms. Mays known that JUUL e-cigarettes increased her risk of suffering medical ailments such as seizure, she never would have tried JUUL products.

102. JUUL never disclosed that it had manipulated the nicotine in JUUL pods to deliver massive doses of nicotine that could put her at a greater risk of seizures.

103. JUUL never instructed Ms. Mays that the product was unsafe for her, nor how much JUUL was safe to consume.

104. Had Ms. Mays known that JUUL was dangerous, that JUUL had manipulated the potency of the nicotine, or that each JUUL pod delivered substantially more nicotine than a pack of cigarettes, she would not have used or continued to use JUUL products.

105. In a short time, Ms. Mays was JUULing multiple JUUL pods a week. She continued her JUULing pattern until she suffered a stroke in or around June 2019. Less than thirty minutes

prior to her first seizure, Ms. Mays had “hit her JUUL” – a term used to describe when you inhale/use/consume a JUUL product.

106. Ms. Mays continued her use of JUUL products after her first seizure, but within weeks - in or around July 2019 - Ms. Mays experienced a second seizure. Once again, thirty minutes prior to her seizure, Ms. Mays had used her JUUL e-cigarette. In this second seizure, Ms. Mays became incoherent. Both seizures required hospitalization.

107. Before she started to use JUUL’s e-cigarette, Ms. Mays was a healthy, active, responsible mother of two. She had no family history or personal indications that she was at risk for a seizure. Ms. Mays’s seizures have left her with severe mental injuries – including diagnosed short term memory issues and decreased mental capacity. She is no longer able to be alone and must now live with other people. Further, because of the harm she has suffered, Ms. Mays is no longer able to be alone with her children and no longer able to babysit.

108. As a direct and proximate result of JUUL’s conduct, Ms. Mays suffered severe and permanent injuries, including: seizures, diagnosed short term memory issues, and decreased mental capacity.

109. As a result of her injuries caused by JUUL’s e-cigarette, Ms. Mays has incurred and will continue to incur significant medical expenses, pain and suffering, and emotional distress. Her earning capacity is greatly diminished, and she no longer lives independently.

V. Causes of Action

COUNT I

STRICT PRODUCT LIABILITY - FAILURE TO WARN

110. Plaintiff realleges and incorporates by reference all preceding paragraphs.
111. Defendants manufactured, distributed, and sold JUUL devices and JUUL pods.

Defendants were aware that the JUUL devices, when used in conjunction with the JUUL pods, had potential risks that were known and knowable in light of scientific and medical knowledge that was generally accepted in the scientific community at the time of design, manufacture, distribution, and sale of JUUL devices and JUUL pods.

112. The JUUL devices and pods were designed, manufactured, and sold by Defendants in the regular course of business and were expected to and did reach Plaintiff without substantial change in the condition in which they were manufactured, sold, and distributed.

113. Plaintiff received the JUUL products in the same conditions in which they were sold, and used her JUUL device and pods in a manner reasonably intended by Defendants.

114. Defendants had no reason to believe that consumers of its JUUL products would be aware of the foreseeable harm associated with use of them.

115. The risks and defects of the JUUL products is unknowable and unacceptable to the average or ordinary consumer. The ordinary consumer would not reasonably anticipate the danger that the JUUL products posed. Nor would the ordinary consumer know the various chemicals in the JUUL pod. JUUL never released what chemicals were present in its JUUL pods.

116. JUUL failed to warn about the chemicals contained in their products. Had Plaintiff known that JUUL products contained chemicals different than, and more potent than chemicals found in traditional cigarettes, she would not have used JUUL's e-cigarette.

117. Plaintiff would not have recognized the potential risks of using a JUUL device with a JUUL pod because Defendants intentionally downplayed, misrepresented, or failed to warn of the risks of the nicotine potency that the JUUL device and JUUL pods posed and failed

to disclose and warn about the absorption rates of that nicotine.

118. As a direct and proximate result of Defendants' failure to warn of the defective and unreasonably dangerous condition and design of the JUUL products and the risk they posed due to the high nicotine content, Plaintiff suffered both incidental and consequential damages.

119. Plaintiff's damages and injuries were directly and proximately caused by Defendants' failure to warn and lack of sufficient instructions or warnings were a substantial factor in causing harm that resulted to Plaintiff.

COUNT II

STRICT PRODUCT LIABILITY – DESIGN DEFECT – RISK – UTILITY TEST

120. Plaintiff realleges and incorporates by reference all preceding paragraphs.

121. The benefits of JUUL Products' design are not outweighed by their risks, considering the gravity of the potential harm resulting from the use of the products, the likelihood that the harm would occur, the feasibility and cost of an alternative safer design at the time of manufacture, and the disadvantages of an alternative design. Defendants designed their products to be more palatable to both smokers and nonsmokers by increasing JUUL's inhaleability, and increased the level of nicotine that is absorbed by users, making them even more dangerous. There were and are alternative designs available to JUUL. Defendants could have significantly lowered the nicotine content, while still delivering sufficient levels to cigarette smokers, to reduce the risks from high exposure to nicotine and repeated exposures to the toxic chemicals in JUUL pods.

122. JUUL had constructive notice or knowledge and knew, or in the exercise of reasonable care should have known, that its products were dangerous, had risks, and were

defective in design, including: delivering high doses of nicotine to users; repeatedly exposing users to toxic chemicals; and causing seizures or strokes resulting in catastrophic, life-altering injuries.

123. As a result of the defect in JUUL's products, Plaintiff was harmed as described herein.

124. Plaintiff's damages and injuries were directly and proximately caused by the defect(s) in JUUL's products as heretofore described.

COUNT III

BREACH OF IMPLIED WARRANTY OF MERCHANTABILITY

125. Plaintiff realleges and incorporates by reference all preceding paragraphs.

126. The Uniform Commercial Code § 2-314, as adopted in Pennsylvania at 13 PA. C.S. § 2314, provides that, unless excluded or modified, a warranty that the goods shall be merchantable is implied in a contract for their sale if the seller is a merchant with respect to goods of that kind.

127. To be "merchantable," goods must "run, within the variations permitted by the agreement, of even kind, quality and quantity within each unit and among all units involved," "are adequately contained, packaged, and labeled as the agreement may require," and "conform to the promise or affirmations of fact made on the container or label if any."⁴⁸

128. The implied warranty of merchantability included with the sale of each JUUL product meant that Defendants warranted that its devices and pods would be merchantable, fit for the ordinary purposes for which they are used, pass without objection in the trade, be of fair average quality, and conform to promises and affirmations of fact made on the container

⁴⁸ 13 PA.C.S. § 231.

and label. This implied warranty of merchantability is part of the basis for the bargain between Defendants and Plaintiff.

129. At the time of delivery however, Defendants breached the implied warranty of merchantability because its devices and pods were defective as alleged above, posed serious safety risks at the time they were sold, would not pass without objection, were not equivalent in terms of nicotine content, pharmacokinetics, and puff-count to cigarettes, and failed to conform to the standard performance of like products (cigarettes and e-cigarettes) used in the trade.

130. Defendants are merchants with respect to the goods which were sold to Plaintiff, and there was an implied warranty that those goods were merchantable.

131. JUUL e-cigarettes are not fit for their intended purposes of offering an alternative to cigarettes because JUUL e-cigarettes, when used as intended or reasonably foreseeable, contain chemicals that are more potent than traditional nicotine found in cigarettes.

132. Plaintiff's damages and injuries were directly and proximately caused by Defendants' breach of their implied warranties. Plaintiff seeks damages in an amount to be determined at trial.

COUNT IV

BREACH OF EXPRESS WARRANTY

133. Plaintiff realleges and incorporates by reference all preceding paragraphs.

134. 13 P.A.C.S. § 2313 provides the following:

(a) General rule--Express warranties by the seller are created as follows:

(1) Any affirmation of fact or promise made by the seller to the buyer which relates to the goods and becomes part of the basis of the bargain

creates an express warranty that the goods shall conform to the affirmation or promise.

(2) Any description of the goods which is made part of the basis of the bargain creates an express warranty that the goods shall conform to the description...

135. Defendants issued express warranties in connection with its sale of JUUL devices and JUUL pods that JUUL use caused the same or less nicotine to enter the bloodstream as a cigarette, that JUUL pods contained about as much nicotine as a pack of cigarettes, and that 10 puffs of a JUUL was equivalent to smoking a cigarette, which were stated on the JUUL website and other media.

136. In the marketing of its JUUL products, the affirmations of fact and promises that Defendants made and set forth directly above became part of the basis of the bargain between Defendants and Plaintiff. This created express warranties that the JUUL products would conform to Defendants' affirmations of fact, representations, promises, and descriptions.

137. Defendants breached their express warranties because JUUL pods and JUUL devices deliver more nicotine and more potent nicotine into the bloodstream than a cigarette, each JUUL pod contains more nicotine than a pack of cigarettes, and fewer than 10 puffs of a JUUL e-cigarette are equivalent to smoking a cigarette with respect to nicotine ingestion.

138. Plaintiff was injured as a direct and proximate result of Defendants' breach of express warranty because: (a) she would not have purchased JUUL products at all, she would have paid less for them, or she would have used them differently if she had known the true facts; (b) she paid a premium price for JUUL products as a result of Defendants' false warranties and misrepresentations; and (c) she purchased products that did not have the

characteristics, qualities, or value promised by Defendants.

COUNT V

NEGLIGENCE AND GROSS NEGLIGENCE

139. Plaintiff realleges and incorporates by reference all preceding paragraphs.

140. Defendants owed a duty to Plaintiff to design, manufacture, produce, test, inspect, market, distribute, and sell the JUUL products with reasonable care and in a workmanlike fashion and had a duty to protect Plaintiff from foreseeable and unreasonable risk of harm.

141. Defendants breached that duty by, among other things as alleged above, misrepresenting the pharmacokinetics of JUUL e-cigarettes, the nicotine content of JUUL pods, the comparative nicotine content of JUUL pods and competing products, and the role of benzoic acid in JUUL pods.

142. Defendants unreasonably failed to provide appropriate and adequate warnings and instructions about its products, and this failure was a proximate cause of the harm for which damages are sought.

143. In addition, at the time the JUUL products left its control, Defendants knew, or in the exercise of reasonable care should have known, the products posed a substantial risk of harm to the life and health of its customers.

144. Defendants knew, or in the exercise of reasonable care should have known, the JUUL products it designed, manufactured, produced, tested, inspected, marketed, distributed, and sold created an unreasonable safety risk and that the products were marketed and sold with material misrepresentations and omissions of material facts. When making these statements, Defendants were aware that these representations were false or made them without knowledge of their truth or veracity.

145. The negligent misrepresentations and omissions made by Defendants, upon which Plaintiff reasonably and justifiably relied, were intended to induce, and actually induced, Plaintiff to purchase the products at issue.

146. Defendants had a duty to disclose to the Plaintiff the serious safety risks posed by JUUL products and that JUUL pods and JUUL devices deliver more nicotine into the bloodstream than a cigarette, each JUUL pod contains more nicotine than a pack of cigarettes, and more than 10 puffs of a JUUL device are equivalent to smoking a cigarette.

147. Defendants failed to exercise reasonable care with respect to the design, manufacture, production, testing, inspection, marketing, advertising, packaging, distribution, and sale of its products.

148. Defendants also failed to exercise reasonable care in failing to warn or to warn adequately and sufficiently, either directly or indirectly, Plaintiff of the addictive nature and negative health consequence of their products.

149. Defendants' acts and omissions constitute gross negligence because they constitute a total lack of care and an extreme departure from what a reasonably careful person would do in the same situation to prevent foreseeable harm to persons like Plaintiff.

150. Defendants acted and/or failed to act willfully, and with conscious and reckless disregard for the rights and interests of Plaintiff. Defendants' acts and omissions had a great probability of causing significant harm and in fact resulted in such harm.

151. As a result of Defendants' negligence and/or gross negligence, Plaintiff was injured as described above.

152. Defendants' negligence and/or gross negligence directly and proximately caused Plaintiff's damages and injuries, and therefore Plaintiff is entitled to damages and other legal and

equitable relief as a result.

COUNT VI

FRAUD

153. Plaintiff realleges and incorporates by reference all preceding paragraphs.

154. Defendants fraudulently and deceptively:

- failed to disclose to Plaintiff that the JUUL products contained nicotine salts that were highly manipulated in order to make JUUL products easier to smoke
- failed to disclose to Plaintiff that the nicotine benzoate salts in JUUL pods delivered nicotine to blood plasma at a rate four times higher than a smoked Pall Mall cigarette.
- failed to disclose to Plaintiff that the nicotine content in a JUUL pod delivered a higher effect to the body than traditional cigarettes.

155. Defendants made each of these fraudulent misrepresentations and omissions to Plaintiff. These acts occurred during the time period relevant to and the dates set forth in this Complaint and within the years prior to the filing of this Complaint.

156. Each of these misrepresentations and omissions were material at the time they were made in that they were essential to the analysis undertaken by Plaintiff as to whether to purchase a JUUL e-cigarette and JUUL pods.

157. Defendants knew that these misrepresentations and omissions were false and intended that Plaintiff rely on these misrepresentations and omissions to purchase JUUL products.

158. Plaintiff justifiably and reasonably relied on these misrepresentations and omissions to her detriment in that she purchased the JUUL products and was thereby damaged in the amount that she paid. Had Plaintiff been adequately informed and not intentionally deceived by Defendants, she would have acted differently by, without limitation: (1) not

purchasing a JUUL e-cigarette or JUUL pod; or (2) purchasing and using different, less potent nicotine products.

COUNT VII

VIOLATION OF THE PENNSYLVANIA UNFAIR TRADE PRACTICES AND CONSUMER PROTECTION LAW, 73 PA. C. S. §§ 201-2 & 201-3, ET SEQ.

159. Plaintiff realleges and incorporates by reference all preceding paragraphs.

160. As set forth above, Defendants violated the Pennsylvania Unfair Trade Practices and Consumer Protection Law, 73 PA. C. S. §§ 201-2 & 201-3, et seq., when they engaged in unfair or deceptive acts or practices in the conduct of any trade or commerce, represented that goods or services have characteristics, ingredients, uses, benefits or quantities that they do not have, and engaged in any other fraudulent or deceptive conduct which creates a likelihood of confusion and misunderstanding.

161. Defendants knowingly engaged in these false, misleading, and deceptive advertising and marketing practices to increase their profits.

162. Defendants' acts in violation of the laws of Pennsylvania include, but are not limited to:

- failing to disclose to Plaintiff that the JUUL nicotine salts they were purchasing were highly manipulated in order to make JUUL products easier to smoke;
- failing to disclose to Plaintiff that the nicotine benzoate salts in JUUL pods delivered nicotine to blood plasma at a rate four times higher than a smoked Pall Mall cigarette;
- developing and marketing a product that contained nicotine levels far in excess of what smokers need to comfortably switch from cigarettes;
- falsely and deceptively marketing, advertising and selling JUUL e-cigarettes and JUUL pods by misrepresenting their nicotine content, nicotine pharmacokinetics, and suitability as an "alternative" to cigarettes;

- setting the price of JUUL pods at a low price that is intended to and does attract users to purchase JUUL products.

163. Plaintiff and Defendants are "persons" within the meaning of section 201-2(2) of the PA. UTPCPL, which includes all "natural persons, corporations, trusts, partnerships, incorporated or unincorporated associations, and any other legal entities."

164. Plaintiff relied to her detriment on Defendants' fraudulent omissions. Had Plaintiff been adequately informed and not intentionally deceived by Defendants, she would have acted differently by, without limitation: (1) not purchasing a JUUL e-cigarette or JUUL pod; or (2) purchasing and using different, less addictive nicotine products.

165. Plaintiff suffered losses as a direct result of Defendants' wrongful conduct when she purchased JUUL products. Plaintiff would not have purchased JUUL products had she known the true health risks associated with JUUL products. Thus, she is entitled to refunds of all monies paid for JUUL products, as well as other damages suffered, including statutory and treble damages.

PRAAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests:

1. That this Court enter judgment and award damages in favor of Plaintiff and against the Defendants under the theories alleged herein for a sum in excess of the requisite amount for this Court to exercise jurisdiction;
2. That this Court order Defendants to refund all monies obtained or statutory damages, whichever is greater, by means of their violation of the Pennsylvania Unfair Trade Practices and Consumer Protection Law, 73 P.A. C. S. §§ 201-2 & 201-3, et seq., including trebling such damages;
3. That this Court award Plaintiff all attorneys' fees, expenses, and costs of this suit

to the fullest extent allowed by law;

4. That this Court award Plaintiffs punitive and treble damages to the fullest extent allowed by law;
5. That this Court award Plaintiff pre-judgment and post-judgment interest at the maximum rate allowable by law, compounded daily; and
6. That this Court grant such other, further, and different relief that the Court deems necessary, just, and proper.

DEMAND FOR JURY TRIAL

Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiff demands a jury trial on all issues and claims so triable.

Respectfully submitted,

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